

2.2.3.10 Western Prairie Ecological Landscape

General Description

The Western Prairie Ecological Landscape is located on the far western edge of the state (Figure 2-30) just south of the Tension Zone. It contains the only true representative prairie potholes in the state. It is characterized by its glaciated, rolling topography and a primarily open landscape with rich prairie soils and pothole lakes, ponds, and wet depressions, except for forested areas along the St. Croix River. The climate and growing season are favorable for agricultural crops. Sandstone underlies a mosaic of soils. Silty loams that can be shallow and stony cover most of the area. Alluvial sands and peats are found in stream valleys.



Figure 2-30. Western Prairie Ecological Landscape.

Vegetation

Historic vegetation was comprised of dry to mesic prairie grasses in the rolling areas and wet prairies in the broad depressions. Open oak savannas and barrens were found on the hilly topography, with small inclusions of sugar maple-basswood forest in small steep sites. Prairie pothole type wetlands were mainly found in St. Croix and Polk counties. Barrens were found along the river terraces of the St. Croix River.

Almost half of the current vegetation is agricultural crops and almost a third of the area is grasslands, with smaller areas of open water, open wetlands, and urban areas (Figure 2-30). The major forest types are maple-basswood and oak-hickory, with smaller amounts of lowland hardwoods and lowland conifer.

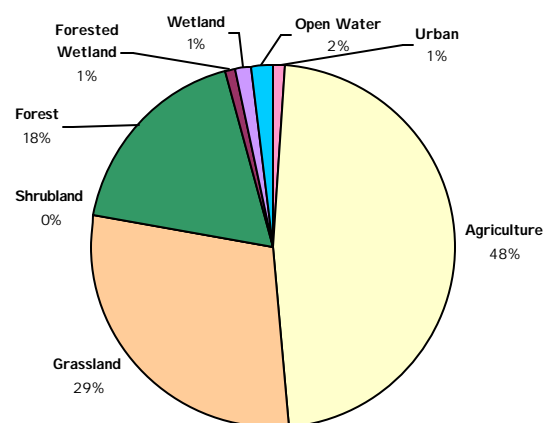


Figure 2-31. Current land cover in the Western Prairie Ecological Landscape.

Hydrologic Features

Two major rivers flow through this Ecological Landscape, the Mississippi and the St. Croix. The St. Croix is a National Scenic River. The Apple and Kinnikinnic are two important secondary streams. This area seems to have an unusual hydrology with greatly fluctuating water levels. The water quality is relatively poor compared with the rest of the state. It has the second poorest rankings for both watersheds overall (11 out of 12 are rated as highly polluted) and groundwater pollution and the worst rankings of any Ecological Landscape for both lake and stream pollution, according to Wisconsin DNR.

Land Use

The total land area for the Western Prairie Ecological Landscape is approximately 698,000 acres, of which 16% is classified as timberland. Less than 3% of the land is in public ownership (Figure 2-32).

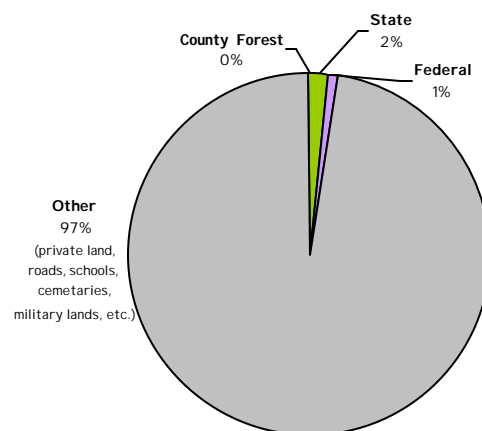


Figure 2-32. Public land ownership in the Western Prairie Ecological Landscape.

Socioeconomics

Socioeconomic data are summarized based on county-level approximations of the Ecological Landscape (referred to as a "region"). Economic data are available only on a political unit basis with counties as the smallest unit. The counties included in this socioeconomic region are Pierce and St. Croix ("Western Prairie Region").

The Western Prairie Region is highly dependent on agriculture. It has the second highest percentage of total acreage in farmland. Note that farmland is defined as all land under farm ownership, which includes cropland, pastureland, and woodland. Compared to the other regions, these counties are third highest in corn production per acre and fourth in milk production per acre. The region has the highest percentage of both agricultural and forest land acreage sold, and the second highest percentage diverted to nonagricultural and non-forest uses. Overall acreage in lakes is low in this region. Per capita water usage in the region is the lowest of all regions in the state.

Although the population density of this region is not high, it does have the fastest growth rate since 1970 and the lowest median age. The population density (108 persons/mi²) is slightly higher than that of the state as a whole (96 persons/mi²). The population is fairly young, not racially diverse, and very well educated, on average. Economically, people in the region are quite prosperous with a high per capita income and the lowest rates of child and adult poverty and unemployment. Agriculture is important with a higher percentage of jobs in agriculture than any other region.

Management Opportunities

- Opportunities for restoring wetland and grassland communities are prevalent in this Ecological Landscape.
- Restoration of wetland/grassland communities throughout this Ecological Landscape with a special focus on grassland birds.
- Maintenance of the St. Croix River corridor including floodplain, goat prairies, oak/pine cliffs, islands, and prairie remnants along the river.
- Protection of the Apple River canyon.
- Protection of the Kinnickinnic River watershed and corridor, which contains many rare plants and significant geological features.
- The Star Prairie/Western Habitat Restoration should continue to receive management emphasis.
- This Ecological Landscape is an important breeding area for the rare loggerhead shrike.
- Continued restoration and maintenance of prairie pothole/wetland complexes and other wetland communities for waterfowl and other wetland wildlife, including the US Fish and Wildlife Service's Waterfowl Production Areas.

Natural Communities

The following table (Table 2-12) lists the natural communities occurring in the Western Prairie arranged by the level of opportunity to sustain and manage the community type in this Ecological Landscape. For further explanation of natural communities and opportunities to sustain them, see Section 3.3.

Table 2-12. Natural communities occurring in the Western Prairie arranged by the level of opportunity to sustain and manage the natural community type in this Ecological Landscape.

Major Opportunity	Important Opportunity	Present
Mesic Prairie	Floodplain Forest	Northern Dry-Mesic Forest
Emergent Aquatic	Southern Dry-Mesic Forest	Northern Mesic Forest
	Southern Mesic Forest	Northern Wet Forest
	Cedar Glade	Southern Dry Forest
	Oak Opening	Emergent Aquatic-Wild Rice
	Oak Woodland	Alder Thicket
	Dry-Mesic Prairie	Ephemeral Pond
	Dry Prairie	Northern Sedge Meadow
	Sand Prairie	Shrub Carr
	Submergent Aquatic	Southern Sedge Meadow
	Bedrock Glade	Wet Prairie
	Dry Cliff	
	Moist Cliff	